| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/709,040 | 04/08/2004 | James I. Percival | 1348111 | 3039 |

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| EXAMINER |
|---|
| NAMAZI, MEHDI |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2188 | |

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _25 October 2004_.

2a)☐ This action is **FINAL.**    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-110_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-110_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All    b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _11/10/2004_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1.      Applicant's arguments with respect to claimas1-110 have been considered but are moot in view of the new ground(s) of rejection.

2.      The terminal disclaimer filed on 10/25/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of patent No. 6,370,615 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### *Declaration*

3.      The declaration under 37 CFR 1.132 filed 11-10-2004 is insufficient to overcome rejection based on Super Cache V1.2 User and Installation Guide A Turbo Ware Product (Revision/update Information V1.2-08; Turbo System International S.A.) as set forth in this office action because:

     Applicant has provided an copy of the License Agreement and cited section 5 of the Agreement (see the Declaration filed 7-18-97 at paragraph 6). However, the License Agreement is not itself determinative of the public use issue, but is one factor to be considered along with the time, place and circumstances of the use which show the amount of control the inventor retained over the invention. In this regard see MPEP & 2133.03(a)(ii). There is no evidence showing the amount of control that the inventor retained over the invention or the SuperCache Guide as part of the licensing agreement.

Furthermore, the reference "EEC ups ante in VMS disk caching arena with three-

tiered package for VAXclusters " (Digital Review, March 16, 1992, v9 n6 p6(1)) appears

to indicate that EEC had introduced a network version of the "SuperCache" product by

March 1992. This appears to contradict paragraph 3 of the declaration filed 7-18-97,

and current declaration filed 11-10-2004. Comment and explanation is required.


### *Claim Rejections - 35 USC § 103*

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over

I/O Express Software Product (as thought by the I/O Express User's Guide and the I/O

Express Technical Report) from Express software, Glendale, CA.

The I/O Express User's Guide ("Guide") and the I/O Express Technical Reports

("Reports") collectively teach the I/O Express Software Product, in view of Supercache

V1.2 User and Installation uide A TurboWare Product.

As per claims 1, 2, 3, 6, 7, 9, 11, 12, 14, 16, 17, 18, 19, 21, 23, 24, 25, 26, 28,

29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 49, 50, 51, 52, 53, 54, 55, 56,

57, 58, 59, 60, 61, 63-94, and 95-110, I/O Express teaches connection of a plurality of

nodes in a clustered system. Each node contains a computer and has its own memory

and cache (multi computers ......coupled together.....each computer including a system

memory). See "reports", SPO TR 92.32 (16 Sept 1992) at page 5. The nodes interact

in a VAX/VMS operating system environment. See "Guide" at page 1-3. the nodes of

the cluster interact together and share resources, such as disk and tape storage

facilities ("plurality of I/O devices..."). See "Reports" SPO TR 92.32 (16 Sept 1992) at

page 5. the nodes in a VAX cluster may interact over an Ethernet("network"). See

"Reports", Glossary of Terms. The I/O Express software represents a "cache driver",

which is installed on the nodes in the cluster. See "Guide", page 1-3. the I/O Express

includes full cluster support for passing a minimal number of messages across the

cluster. See "Guide" at page 3-3. As further taught by "Guide" at page 2-6, when "a

node joins the VAXcluster, caching cluster-wide is disabled automatically until I/O

Express is started on the new node". This statement indicates that a node joining the

VAXcluster can communicate with other nodes in the cluster ("means for

communicating with cache drivers on any of said computers"), and the other nodes

respond to the communication from node joining the cluster by disabling the caching

("means for listing.............for a request from a new computer to connect to said

network"), "Guide" teaches on page 3-2 that I/O Express continually checks to see if

there is a memory crisis pending, "Guide teaches on page ix allocation and deallocation

(reducing) of the memory to the cache based on system resources is taught.

As per claims 1, 4, 9, 10, 14, 20, 21, 25, 27, 28, 30, 45, 46, 47, 48, 62, I/O

Express does not teach a plurality of caches each being of a different data bucket size.

Supercache teaches utilizing three caches ("data buckets") and qualifiers for the

different caches in the cache start command (page 4-3, section 4.2.2.1.1. it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a plurality of caches and associated qualifiers for the different caches, as taught by Supercache, because Supercache teaches in the first line of section 4.2.2.1.1 that three caches is more efficient instead of a less effective single cache.

As per claims 5, 13, 32, 33, I/O Express does not teach wherein additional computers may join the network, and wherein each of the multiple computers is configured to monitor which computers in the network are configured to cache said data.

Supercache teaches establishing a connection for caching (i.e. "SuperCache V1.2") for system Communication Services (SCS) as set forth at page 3-6 and figure 3-1. it would have been obvious to one having ordinary skill in the art at the time the invention was made to establish a connection for caching for massage passing between computers in the network, as taught by Supercache, because Supercache indicates that SCS is the fastest method of communication system to system, as set forth on page 3-5.

As per claims 8, 17, 34, 35, 40, 41, 52, "Guide at page 2-6, when "a node joins the VAXcluster, caching cluster-wide is disabled automatically until I/O Express is started on the new node". This statement indicates that a node joining the VAXcluster can communicate with other nodes in the cluster ("means for communicating with cache drivers on any of said computers").

As per claims 15, 22, "Reports" SPO TR 92.36 (30 Sept 1992) teaches write operations at pages for .....intercepting a write instruction") and the other nodes in the cluster are notified about the modified data blocks, which are invalidated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Namazi whose telephone number is 571-272-4209. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mehdi Namazi
January 10/2005

MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER